

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for the improvement of lung function, comprising administering to a mammalian subject diagnosed with a disease or condition benefiting from the improvement of lung function an effective amount of a molecule capable of inhibiting a biological activity mediated by a TGF β -R1 kinase receptor, wherein said disease or condition benefiting from the improvement of lung function is unaccompanied by lung fibrosis.

2. (Original) The method of claim 1 wherein said disease or condition benefiting from the improvement of lung function is selected from the group consisting of emphysema, chronic bronchitis, chronic obstructive pulmonary disease (COPD), pulmonary edema, cystic fibrosis, occlusive lung disease, acute respiratory deficiency syndrome (ARDS), asthma, radiation-induced injury of the lung, lung injuries resulting from infectious causes, inhaled toxins, or circulating exogenous toxins, aging and genetic predisposition to impaired lung function.

3. (Original) The method of claim 1 wherein said disease or condition benefiting from the improvement of lung function involves acute lung injury.

4. (Canceled)

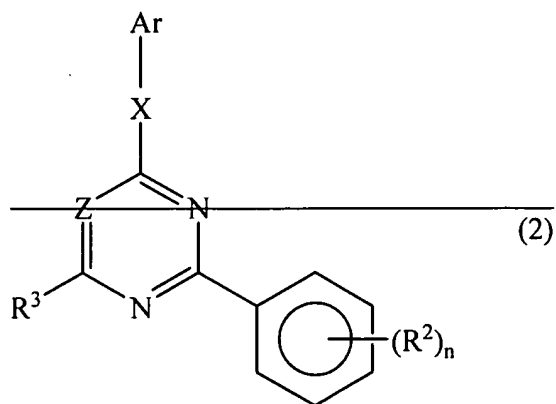
5. (Original) The method of claim 1 wherein said disease or condition benefiting from the improvement of lung function is at a stage when lung fibrosis is not a major symptom.

6-9. (Canceled)

10. (Original) The method of claim 9 wherein said compound is a small organic molecule.

11-18. (Canceled)

19. (Currently amended) The method of claim 10 wherein said small organic molecule is a compound of formula (2)



~~and the pharmaceutically acceptable salts and prodrug forms thereof; wherein~~

~~Ar represents an optionally substituted aromatic or optionally substituted heteroaromatic moiety containing 5-12 ring members wherein said heteroaromatic moiety contains one or more O, S, and/or N;~~

~~X is NR¹, O, or S;~~

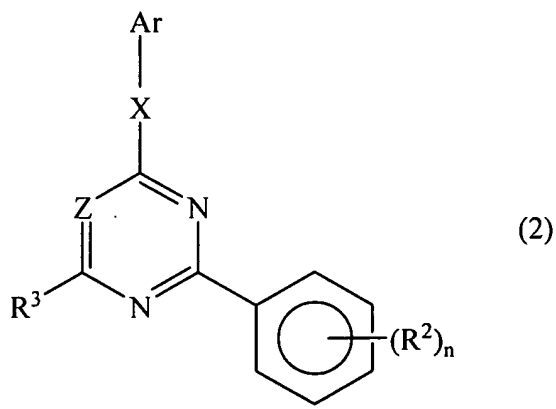
~~R¹ is H, alkyl (1-8C), alkenyl (2-8C), or alkynyl (2-8C);~~

~~Z represents N or CR⁴;~~

~~each of R³ and R⁴ is independently H, or a non-interfering substituent;~~

~~each R² is independently a non-interfering substituent; and~~

~~n is 0, 1, 2, 3, 4, or 5.~~



or the pharmaceutically acceptable salt thereof; wherein

Ar represents an optionally substituted 2-, 3- or 4-pyridyl, indolyl, 2- or 4-pyrimidyl, pyridazinyl, benzotriazol or benzimidazolyl;

X is NR¹ or S;

R¹ is H, alkyl (1-8C), alkenyl (2-8C), or alkynyl (2-8C);

Z represents CR⁴;

each of R³ and R⁴ is independently H, alkyl, alkenyl, alkynyl, acyl, aryl, alkylaryl, aroyl, O-aryl, O-alkylaryl, O-aroyl, NR-aryl, NR-alkylaryl, NR-aroyl, or the hetero forms of any of the foregoing, halo, OR, NR₂, SR, -SOR, -NRSOR, -NRSO₂R, -SO₂R, -OCOR, -NRCOR, -NRCONR₂, -NRCOOR, -OCONR₂, -COOR, -SO₃R, -CONR₂, -SO₂NR₂, -CN, -CF₃, or -NO₂, wherein each R is independently H or alkyl (1-10C);

wherein any alkyl, alkenyl, alkynyl, acyl or aryl groups contained in R³ and/or R⁴ may contain one or more heteroatoms and/or optionally be further substituted;

each R² is independently alkyl, alkenyl, alkynyl, acyl, aryl, alkylaryl, aroyl, O-aryl, O-alkylaryl, O-aroyl, NR-aryl, NR-alkylaryl, NR-aroyl, or the hetero forms of any of the foregoing, halo, OR, NR₂, SR, -SOR, -NRSOR, -NRSO₂R, -SO₂R, -OCOR, -NRCOR, -NRCONR₂, -NRCOOR, -OCONR₂, -COOR, -SO₃R, -CONR₂, -SO₂NR₂, -CN, -CF₃, or -NO₂, wherein each R is independently H or lower alkyl (1-4C), wherein any alkyl, alkenyl, alkynyl, acyl or aryl groups contained in R² may contain one or more heteroatoms and/or may optionally be further substituted;
and

n is 0, 1, 2, 3, 4, or 5.

20-30. (Canceled)